AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method for providing a tool for a powered machine, the tool comprising a body having a shaped working end and a striking end, the tool having vibration damping means, the [[a]] shaped working end having a tip, and the [[a]] striking end having a tip, said method comprising the steps of:

a) determining an estimated antinode position of vibration of the tool in use when the tip of the shaped working end is hinged and the tip of the striking end is free to vibrate; and

b) locating a vibration damping member around the body of the tool to cover the antinode position determined in step a).

2. (Cancelled)

3. (Original) A method as claimed in claim 1, in which at step a) the tool is modelled as a uniform beam, or rod, having a uniform section and uniformly distributed load.

4. (Currently Amended) A method as claimed in claim 1, in which at step a) an estimated antinode position is derived from [[of one]] a mode shape ~~from the first three harmonic mode shapes~~ of vibration of the tool in use ~~is determined~~, the mode shape of vibration including at least one of a first harmonic (fundamental frequency) mode shape, a second harmonic mode shape, and a third harmonic mode shape.

5. (Original) A method as claimed in claim 1, further comprising the steps of:

c) determining a plurality of estimated antinode positions according to step a);

d) selecting a plurality of antinode positions from the antinode positions determined at step c) to cover with a vibration damping member; and

e) locating a vibration damping member arrangement to cover each selected antinode position.

6. (Original) A method as claimed in claim 5, in which said vibration damping member arrangement comprises a vibration damping member located to cover more than one estimated antinode position.

7. (Original) A method as claimed in claim 1, in which at step b) said vibration damping member is adhered, mechanically forced or shrunk onto said tool.

8. (Currently Amended) A tool for a powered machine, the tool comprising a body having a shaped working end and a striking end, the tool having vibration damping means, the ~~[[a]]~~ shaped working end having a tip, and the ~~[[a]]~~ striking end having a tip, said vibration damping means comprising a vibration damping member located around the body of the tool to cover an estimated antinode position of vibration of the tool in use when the tip of the shaped working end is hinged and the tip of the striking end is free to vibrate.

9. (Cancelled)

10. (Original) A tool as claimed in claim 8, comprising a vibration damping member that is adhered, mechanically forced or shrunk onto said tool.

11. (Original) A tool as claimed in claim 8, comprising a vibration damping member located to cover an estimated antinode position of vibration of the tool in use when the tool is modelled as a uniform beam, or rod, having a uniform section and uniformly distributed load.

12. (Currently Amended) A tool as claimed in claim 8, comprising a vibration damping member located to cover an estimated antinode position of ~~[[one]]~~ a mode shape ~~from the first three harmonic mode shapes~~ of vibration of the tool in use, the mode shape of vibration including at least one of a first harmonic (fundamental frequency) mode shape, a second harmonic mode shape, and a third harmonic mode shape.

13. (Original) A tool as claimed in claim 8, comprising a vibration damping member arrangement located to cover each of a plurality of estimated antinode positions.

14. (Original) A tool as claimed in claim 13, in which said vibration damping member arrangement comprises a vibration damping member located to cover more than one estimated antinode position.

15. (New) A method as claimed in claim 1, in which said vibration damping member is a viscoelastic vibration damping member.

16. (New) A method as claimed in claim 1, in which said tool is forged and/or machined steel.

17. (New) A method as claimed in claim 1, in which said vibration damping member has a tube shape.

18. (New) A tool as claimed in claim 8, in which said vibration damping means is a viscoelastic vibration damping member.

19. (New) A tool as claimed in claim 8, in which said tool is forged and/or machined steel.

20. (New) A tool as claimed in claim 8, in which said vibration damping member has a tube shape.